ville map and section sheet and the accompanying report have been printed and will soon be ready for distribution.

During the past month, arrangements have been perfected for intimate cooperation between the World's Fair Commission and the Geological Survey, such that the material accumulated and the great amount of knowledge acquired by the latter organization concerning the geology and the mineral deposits of the State will be applied in the interests of the prospective exhibit in Chicago. The plans adopted and the progress already made in the execution of these plans yield abundant promise that the display in this department will be of the greatest possible credit and advantage to the State.

The Pacific Cable Survey.—The United States steamer Thetis has been making a second survey for the proposed cable between San Francisco and Honolulu, and met with far greater success than was had in the first survey, made by the steamer Albatross six months ago, when the line of survey was from a point on Monterey Bay, direct to Honolulu. The Thetis made a start from Point Conception, 220 miles south of San Francisco and thirty-eight miles west of the town of Santa Barbara, and at the head of Santa Barbara channel. At the point there is high ground and the water shoals off on a mud bottom. As a landing place for a submarine cable everything is favorable. The course taken by the Thetis was nearly due southwest and by way of the great circle. Soundings were made every two miles until 900 fathoms was reached. As the steamer proceeded toward the Hawaiian islands the depth of water gradually increased until 3000 fathoms was averaged for miles. Soundings were taken at intervals of ten miles where the bottom was found of a level nature and where irregular or undulating at distances down to half a mile. The greatest depth reached was 3228 fathoms when about 300 miles from Hilo on the island of Hawaii, which is marked as the landing-place at the islands. Thirty-five miles from Hilo the water shoaled to 1000 fathoms, and from that gradually on to twenty fathoms. There is more water at Hilo than at Point Conception. The island of Hawaii is about 200 miles southeast of Honolulu and can be connected by a short cable. By the Thetis survey the cable will run 2060 miles. The Albatross survey is about fifty miles longer, but not quite as practicable owing to the bottom of the sea being very irregular over a greater part of the first survey.

Fourth Note on the Dinosauria of the Laramie.—Previous notes on this subject have appeared in the NATURALIST for 1888 p. 1108; 1889 p. 715; and 1889 p. 904. In the present communication

two additional forms are described, and rectifications of synonomy are made.

MANOSPONDYLUS GIGAS.—Gen. et sp. nov. *Char. Gen.*—Dorsal vertebræ with short anteroposterior diameter, and gently concave articular faces. Neurapophyses coössified. At the superior part of the centrum, a deep entering fossa; surfaces of circumference otherwise uninterrupted. Tissue of centrum at borders of articular faces coarsely vesicular. The form of these vertebræ indicates that this genus is allied to the Agathaumidæ rather than the Hadrosauridæ. No genus of either family known to me possesses the fossæ at the base of the neural arch.

Char. specif.—Dorsal centrum a little deeper than wide. Lateral surfaces smooth.

Diameters of centrum.		mm.
Articular face	vertical	205
	transverse	200
Anteroposterior		90

Two dorsal vertebræ are the only remains which I can refer to this species, which is the most gigantic of the Dinosauria of the Laramie known to me. In the same neighborhood, but several hundred yards distant, I discovered a huge supratemporal bone, which differs from those of some of the allied genera in having a simple undulate free border, without tuberosities or processes. Its form is similar to that of Agathaumas, *i. e.* as broad as long posterior to the quadrate suture. There is no evidence that it belongs to this species.

CLAORHYNCHUS TRIHEDRUS.—Gen. et. sp. nov. *Char. Gen.*—This genus is established on a rostral and predentary bones of a species of the Agathaumidæ, which were found together and with the fragments of a massive supratemporal bone. They are distinguished by their absolutely flat inferior faces, there being no alveolar ridges as in the forms described by Marsh. They are not compressed but are as wide as long. They are not adapted to the muzzle of Monoclonius, where the rostral bone is compressed. (*M. sphenocerus.*)

Char. specif.—Rostral and predentary bones as wide as long, with flat inferior face and rounded superior median angle. Transverse diameter rather exceeding the vertical. Sides convex. All the surfaces furrowed by coarse grooves which terminate in foramina.

The short wide form of this species differs from that seen in the species of the family Agathaumidæ which have been yet described.

The extremity of the beak had apparently a horny sheath and was adapted for crushing comparatively hard substances.

AGATHAUMAS COPE—Professor Marsh (Amer. Journ. Sci. Arts, 1892, p. 83) endeavors to show that this genus differs from any of those described by him by quoting characters from my description of the type specimen. Since my last description of that genus was published (1875), I have studied part of a skeleton obtained by Dr. J. L. Wortman in Dakota, of which the parts are undistinguishable from those of the *Agathaumas silvestre*. These include an ilium in much better preservation than that of the type, and I am enabled to correct some of the statements contained in my original description. I stated that there is no facet for the pubis at the front of the acetabulum. The surface at this point is broken in both of my specimens, but it is altogether probable that the structure at this point does not differ from that of the allied forms. The ischiadic suture is in like manner obscured by injuries in the type specimen. The Dakota specimen is perfectly preserved at this point, and displays a large convex sutural surface for the ischium, thus showing that my original description was imperfect in this point. The number of sacral vertebræ in the original specimen is not exactly determinable—only approximately, but this region is identical in character with that of other members of the family. That the *Agathaumas silvestre* is one of the largest species of the family is indicated by the following measurements of the Dakota specimen:

		mm.
Length of ilium		1465
Length of tibia		940
Diameters of tibia	greatest proximal	325
	greatest distal	290
Diameters of dorsal centrum	anteroposterior	95
	vertical	138
	transverse	137

The centrum of the dorsal vertebra is slightly opisthocœlous.

PTEROPELYX COPE—This genus was described by me in THE AMERICAN NATURALIST for October, 1889 p. 904 (published March 5th, 1890), It has been subsequently named by Marsh, Claosaurus, in the American Journ. Sci. Arts. for May, 1890 (p. 423).—E. D. COPE.

On a New Genus of Mammalia from the Laramie Formation.—In 1881 I had the pleasure of announcing the existence of Mammalia in the Laramie formation, and described the new genus